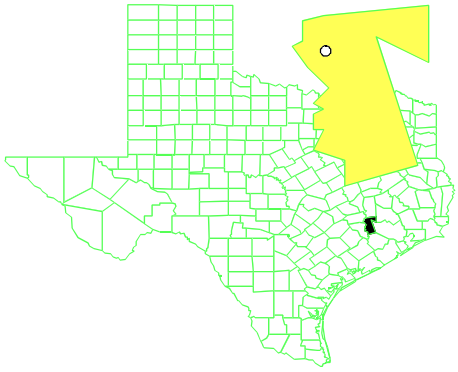
SHERIDAN DISPOSAL SERVICES

TEXAS

EPA ID# TXD062132147



EPA REGION 6
CONGRESSIONAL DISTRICT 14
Waller County

April 21, 2000

Site Description

Location:
- The site is located about nine miles northwest of Hempstead in Waller County, at the border of Washington County, Texas.
- The facility is bounded by the Brazos River (north) and Clark Road (south).
- The surrounding area is primarily farm and grazing land.

Population:
- The Town of Brown College, with approximately 60 residents, is about 1½ miles north of the site.

Setting:
- The nearest residence and drinking water well are less than a mile from the site.
- The site area is predominantly agricultural.
- The site covers 110 acres in a 695 acre tract of land which includes a 15-acre lagoon and a 40-acre evaporation land farm.

Hydrology:
- The shallow aquifer (0-75 feet) is comprised of recent Brazos River alluvial sediments, which include silty clays with sand and gravel stringers.
- The Evangeline Aquifer appears to underlie the recent alluvium which is a thick unit of alternating clay and sand layers.

Wastes and Volumes

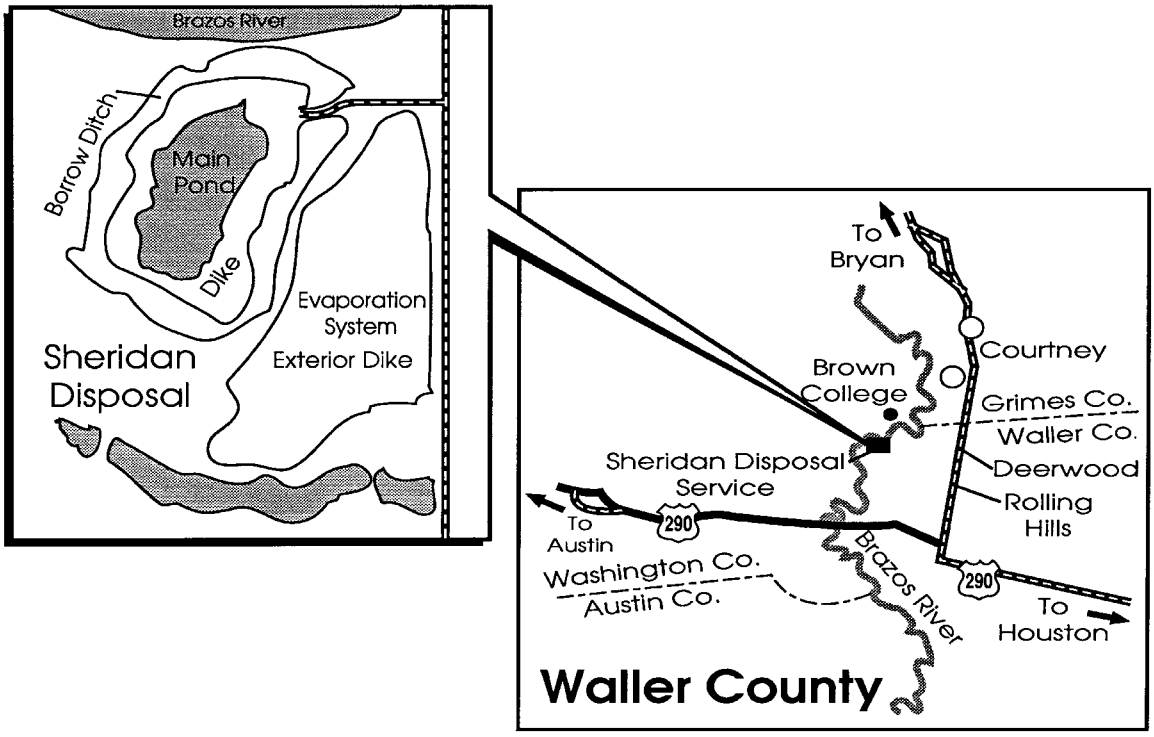
- The principal pollutants in sludges in the former waste lagoon at the Sheridan site include approximately 5% volatile organics compounds such as benzene, ethyl benzene, toluene, and trichloroethylene (TCE); polychlorinated biphenyls (PCBs) at approximately 100 parts per million (ppm); and roughly 30% inorganic compounds such as heavy metals.

- The volume of wastes at the site are estimated to be 44,000 cubic yards of sludge and contaminated soil, located primarily in a large waste lagoon.

Site Assessment and Ranking

NPL LISTING HISTORY
Site HRS Score: 30.67
Proposed Date: 6/10/86
Final Date: 3/31/89
NPL Update: No. 5

Site Map and Diagram



The Remediation Process

Site History:

- Sheridan Disposal Services collected waste oils and solvents from a variety of sources for disposal in an on-site surface impoundment, landfarm, and incinerator. The surface impoundment was operated from 1963 to 1973.
- In 1963, the Texas Water Quality Board issued a permit authorizing disposal of non-hazardous and industrial wastes. After permitting, the Texas Water Quality Board (TWQB) [now known as the Texas Natural Resource Conservation Commission] received complaints concerning odor, runoff, and oil in the Brazos River. The State also noted increased concentrations of contaminants in on-site monitoring wells.

- In 1970, the TWQB and Waller County filed suit against the Sheridan facility. In 1975, a judgement was entered by the Court which prohibited further discharge of wastes into the lagoon. After numerous discussions with Sheridan Disposal Services, the TWQB determined that the facility did not have the economic or technical resources necessary to close the lagoon properly.
- After polychlorinated biphenyls were identified in the lagoon, EPA became involved in the site closure through the Toxic Substances Control Act. In 1986 the site was proposed for inclusion on the NPL.

Health Considerations:

- Contaminants have been identified in the upper aquifer which is connected to the Brazos River.
- The Brazos River and the shallow alluvial aquifer and Evangeline Aquifer are utilized for drinking water supplies.

Record of Decision

Signed: December 29, 1988 (Source)
September 27, 1989 (Ground Water)

Source Control:

- The remedy selected for the Sheridan site waste ponds, tanks and soils in the Record of Decision (ROD) was biotreatment, also known as biodegradation or bioremediation.
- Wastes to be treated included all those containing greater than 25 ppm PCBs, floating oil and emulsion in the waste pond and storage tanks, affected soil beneath the waste lagoon, and dike surface soils.
- A flexible spur jetty river bank erosion control system was installed in the Brazos River.
- Treated sludges will be stabilized, returned to the lagoon and capped, or stabilized and landfilled onsite. A RCRA-compliant cap will be installed over the entire lagoon and dike area.

Ground Water:

- The ROD for ground water calls for natural attenuation of contamination.
- This remedy relies on natural processes such as sorption and biodegradation for in-place mitigation of contaminated ground water in the aquifer.
- Alternate Concentrations Limits (ACLs) established as site ground water protection limits.
- Ground water to be monitored to ensure that ACLs are not exceeded.
- Sampling and analysis of the Brazos River to be conducted immediately downgradient and upgradient of the point-of-entry of ground water from the site into the river.
- Development of a corrective action plan to ensure that protective levels are met at the point of potential exposure in the event that ACLs are exceeded.

Other Remedies Considered	Reason Not Chosen

----------Source Control----------	
1. Soil mixing	**Resulted in great volume increased water, little mobility or toxicity reduction.**
2. Stabilization.	**High organic content of sludge made stabilization long-term effectiveness questionable.**
3. Solvent Extraction	**Potential implementation problems and high costs were not justified by significantly greater protectiveness.**
4. Incineration	**Same as above.**

----------Ground Water----------	
1. Ground water recovery wells and treatment	**Poses some risk to on-site workers, and results in significantly greater cost with negligible effect on cleanup time.**
2. Slurry wall and ground water recovery and treatment	**Same as 1 above. Also, implementation problems installing the slurry wall.**

Community Involvement

- Community Involvement Plan: Developed 10/86
- Open houses and workshops: 5/91, 9/92
- Proposed Plan Fact Sheet and Public Meeting: 11/88 (Source), 7/89 (Ground Water)
- ROD Fact Sheet: 1/89 (Source), 10/89 (Ground Water)
- Milestone EPA Fact Sheets: 9/86, 12/89, 6/90
- Sheridan Site Trust (PRP) Fact Sheets: 8/87, 7/88, 4/90, 1/91, 4/91, 6/91, 4/92, 10/92, 1/93
- Citizens on EPA site mailing list: 96
- Constituency Interest: The site has a historically low level of citizen interest.
- Site Repository: Waller County Library, 2331 11th Street, Hempstead, TX 77445

Technical Assistance Grant

- Availability Notice: 4/9/89
- Letters of Intent Received: None
- Grant Award: N/A
- Current Status: No apparent citizen interest in applying for grant

Contacts

- **Remedial Project Manager (EPA):** Gary A. Baumgarten, 214-665-6749, Mail Code: 6SF-AP
- **State Contact:** (TNRCC) Alan Etheredge, (512) 239-2139, Mail Code: MC-143
- **Community Involvement Coordinator (EPA):** Donn Walters, 214-665-6483, Mail Code: 6SF-P
- **Attorney (EPA):** Anne Foster, 214-665-2169, Mail Code: 6SF-DL
- **State Coordinator (EPA):** Karen Bond, 214-665-6682, Mail Code: 6SF-AP
- **Region 6 Ombudsman:** Arnie Ondarza, 214-665-6790, Mail Code: 6SF
- **Prime Contractor:** EPA Oversight Contractor is Tetra Tech EM Inc.

Enforcement

- ! Information Request and General Notice letters sent to 84 PRPs - 6/20/86
- ! Information Request and General Notice letters sent to 20 PRPs - 7/10/96
- ! Administrative Order on Consent for performance of the RI/FS for the Source Control and Ground Water Operable Units - 2/3/87
- Administrative Order for responsible parties to lower the water level of the lagoon - 7/8/87
- General Notice and Information Request letters sent to 57 PRPs - 1/27/89
- Special Notice Letter sent to PRP providing them with the opportunity to conduct or support the Source Control Remedial Action/Remedial Design (RD/RA) - 2/10/89
- Special Notice Letter sent to PRPs providing them with the opportunity to conduct or support the Ground Water Migration Management RD/RA - 10/31/89
- Administrative Order on Consent for responsible parties to conduct a Biotreatment Pilot Study - 7/2/90
- Consent Decrees for the Source Control and Ground Water Migration Management Operable Unit RD/RAs lodged with United States District Court, Southern District of Texas - 12/3/91
- ! Consent Decrees for the Source Control and Ground Water Migration Management Operable Units entered by the United States District Court, Southern District of Texas on - 10/22/97

Present Status and Issues

- ! The Sheridan Site Trust, who represent the potentially responsible parties (PRPs) met with EPA in November 1996 to discuss details of a proposed Remedial Technology Review Program (RTRP). The purpose of the RTRP is to evaluate possible new remedies for the site. Treatability studies to evaluate solidification/stabilization and solid phase biotreatment are being conducted as part of the RTRP.
- ! Based on the results contained in the 1998 Treatability Study report, the PRPs submitted a workplan for a additional bench-scale treatability studies (Supplemental Treatability Study). The purpose of the additional treatability study is to evaluate solidification/stabilization agents that can meet site-specific performance standards.
- ! The Supplemental Treatability Study workplan has been approved and the PRPs' contractor is conducting the work. Results from the treatability study should be available in summer 2000.

Benefits

- ! Periodic maintenance of the levee system has occurred to prevent flooding of former disposal areas and possible contamination of the Brazos River.
- ! The remediation once completed will prevent contamination from migrating into ground water and also stop contaminated ground water from discharging into the Brazos River.